### PROJECT DESCRIPTION

#### GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 139 (CHARLES ST.) AND MD 134/BELLONA AVE. IN BALTIMORE COUNTY. MD 139 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

#### INTERSECTION OPERATION

THE INTERSECTION IS OPERATING IN A NEMA SIX-PHASE. FULL-TRAFFIC ACTUATED MODE WITH THE MD 139 APPROACHES OPERATING CONCURRENTLY AND THE MD 134 APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE LEFT-TURN PHASING EXISTS FOR NORTHBOUND MD 139 (CHARLES STREET) APPROACH. RIGHT TURN OVERLAP PHASING EXISTS ON THE MD 134/BELLONA AVENUE APPROACHES. EXCLUSIVE PHASING WILL BE PROVIDED FOR THE SOUTHBOUND MD 139 (CHARLES STREET) APPROACH.

PEDESTRIAN INDICATIONS ARE PROVIDED ACROSS THE MD 134/BELLONA AVE. APPROACHES AND ALTERNATE PEDESTRIAN PHASES ARE PROVIDED ACROSS THE MD 139 APPROACHES.

#### CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER SHALL BE USED.

### MAINTENANCE OF TRAFFIC

THE FOLLOWING MINIMUM TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.03-09 (INTERSECTION FAR-LEFT LANE CLOSURE) STANDARD NO. MD-104.03-11 (INTERSECTION FAR-RIGHT LANE CLOSURE)

STANDARD NO. MD-104.03-13 (FAR SIDE CLOSURE)

### PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. RANDALL SCOTT ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: (410) 321-2781/2785

MR. STEVE MARCISZEWSKI ASSISTANT DISTRICT ENGINEER - MAINTENANCE

MR. MIKE PASQUARIELLO ASST. DISTRICT UTILITY ENGINEER PHONE: (410) 321-2841

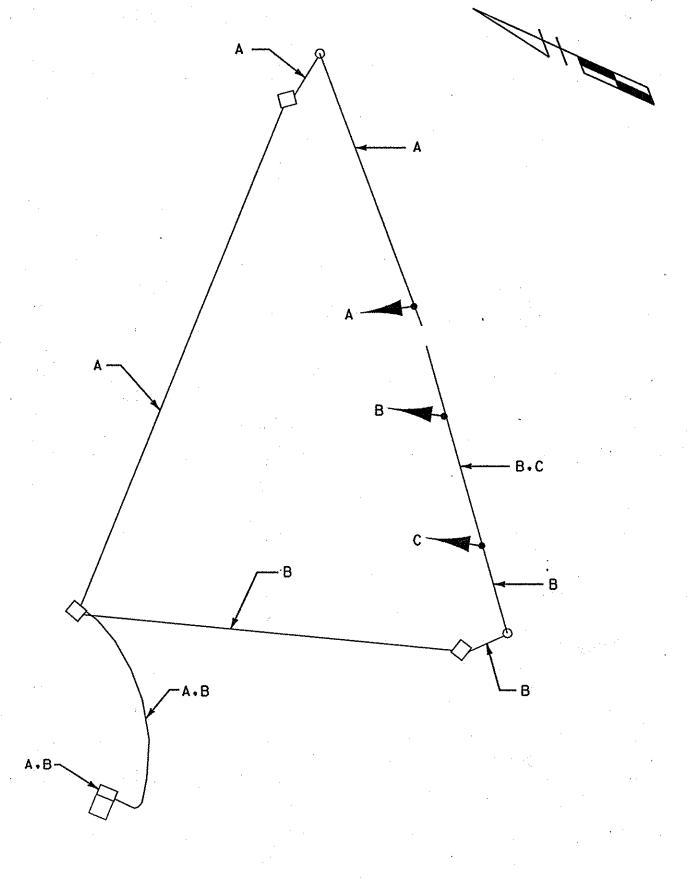
MR. RICHARD L. DAFF. SR. CHIEF. TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630

### WIRING DIAGRAM

WIRING KEY

PHONE: (410) 321-2761

5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)



## EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED AND INSTALLED BY THE SHA

DESCRIPTION QUANTITY 25 S.F. SHEET ALUMINUM SIGNS TO CONSIST OF : - 1 EACH R10-5 SIGN (30 IN. x 24 IN.) - MAST ARM MOUNT - 4 EACH R10-4(1) SIGN (9 IN. x 12 IN.) - POLE MOUNT - 2 EACH R3-5(R) SIGN (30 IN. x 36 IN.) - MAST ARM MOUNT 1 EACH MAINTENANCE OF TRAFFIC 12 INCH PEDESTRIAN SIGNAL HEAD 4 EACH 18 EACH 12 INCH RED OR GREEN LED SIGNAL HEAD SECTION 10 EACH 12 INCH YELLOW LED SIGNAL HEAD SECTION

INSTALL OVERHEAD SIGN RELOCATE EXISTING SIGNAL HEAD 550 L.F. ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)

REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

1 EACH

25 S.F.

1 EACH

# EQUIPMENT LIST "B"

A. EQUIPMENT TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR NONE

# PHASE CHART

PHASE I + 5	<b>←</b> G—	R	R	<b>←</b> G—	<b>←</b> G—	<b>←</b> G—	R	R	R	R —G→	R	R —G.→	DW	DW	DW	DW	بر ب ا
I + 5 CHANGE	PHASE	1 + 5	MAY	CHANGE	E TO P	HASE I	+ 6,	PHASE	2 + 5	OR P	HASE 2	2 + 6					<b>₩</b> ,,
PHASE I + 6	<b>←</b> G—	G	G	<b>←</b> G—	<b>←</b> R—	<b>←</b> R—	R	R	R	R —G→	R	R	DW	WK	WK	DW	<u>1</u>
I + 6 CHANGE	<b>←</b> Y —	G	G	<b>←</b> Y —	<b>←</b> R—	<b>←</b> R—	R	R	R	R —G→	R	R	DW	WK	WK	DW	- √ T(
PHASE 2 + 5	<b>←</b> R—	R	R	<b>←</b> R—	<b>←</b> G—	<b>←</b> G—	G	G	R	R	R	R —G→	WK	DW	DW	WK	<b>*</b> *
2 + 5 CHANGE	<b>←</b> R—	R	R	<b>←</b> R—	<b>←</b> Y—	<b>←</b> Y—	G	G	R	R	R	R —G→	WK	DW	DW	WK	
PHASE 2 + 6	<b>←</b> R—	G	G	<b>←</b> R—	<b>←</b> R—	<b>←</b> R—	G	G	R	R	R	R	WK	WK	WK	WK	1
PED CLEARANCE	<b>←</b> R—	G	G	<b>←</b> R—	<b>←</b> R—	<b>←</b> R—	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	
2 + 6 CHANGE ·	<b>←</b> R—	Υ	Y	<b>←</b> R—	<b>←</b> R—	<b>←</b> R—	Y	Υ	R	R	R	R	DW	DW	DW	DW	т.
PHASE 4 + 8	<b>←</b> R—	, R	R.	<b>←</b> R—	<b>←</b> R—	<b>←</b> R—	R	R	G	G	G	G	- DW	DW	DW	DW	
4 + 8 CHANGE	<b>←</b> -R	R	, R	<b>←</b> R—	<b>←</b> R—	<b>←</b> R—	R	R	Υ	Υ	Y	Y	DW	DW	· DW	DW	}
PHASE 4 + 8 ALT	<b>←</b> R—	R	R	<b>←</b> R—	<b>←-</b> R	<b>←</b> R—	R	R	G	G	G	G	DW	DW .	DW	DW	ρ 👇
PED CLEARANCE	<b>←</b> R—	R	R	<b>←</b> R—	<b>←</b> R—	<b>←</b> R—	R	R	G `	G	G	G	DW	DW	DW	DW	
+ 8 ALT CHANGE	<b>←</b> R—	R	·R	<b>←</b> R—	<b>←</b> -R	<b>←</b> R —	R	R	Υ	Υ	Υ	Y	DW	DW	DW	DW	
FLASHING OPERATION	FL/ ←R—	FL/Y	FL/Y	FL/ ←R—	FL/ ←R—	FL/ ←R—	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	4,



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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET MD 139 (Charles St.) AND MD 134/Bellona Ave.

RAWN BY: S.	BLOSS	F.A.P. NO.		TS NO.	
HECKED BY: N.	LEARY	S.H.A. NO.	SF-SIGNAL	TS-1824B	SHEET I
CALE: NO	ONE	COUNTY:	BALTIMORE	T.I.M.S. NO.	
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